Job Code
6865 (Electric)
6855 (Civil)

Approved/Adopted Date
12/19/95
Revised

CITY OF RIVERSIDE

HUMAN RESOURCES DEPARTMENT

CLASSIFICATION SPECIFICATION

TITLE: **UTILITIES SUPERVISING ENGINEERING TECHNICIAN (ELECTRIC)**
SUPERVISING ENGINEERING TECHNICIAN (CIVIL)

DEFINITION

To supervise and perform para-professional office and field engineering work including drafting; field; survey; project design, calculations, and layout; contract administration; inspection; engineering related computer aided technology and applications; and related duties as required.

DISTINGUISHING CHARACTERISTICS

This is the supervisory level in which incumbents supervise and perform complex work requiring substantial para-professional engineering work experience and further formal training. Work assignments involve full responsibility for coordinating, performing, assigning, and reviewing the work of an assigned section. Incumbents perform projects of the greatest size and highest levels of complexity. Assignments involve multiple considerations and the use of technical knowledge and skill in the investigation, study, and resolution of various project related issues. Incumbents have full responsibility for completion of multiple work orders, and responsibility for resolving the most complex field problems.

REPORTS TO: Varies

SUPERVISION RECEIVED AND EXERCISED

Receives general direction. Full responsibility is assigned for a segment (function) of the Department's work. Minimal guidance is provided and communication with the supervisor is primarily a reporting function. Work is performed independently in response to the needs. Judgement is required in interpreting established policies and in applying strategies which deviate from traditional methods and practices. Exercises direct supervision. In addition to technical and functional supervision, incumbents are responsible for an entire functional area or group giving general instructions and interpretation of policies and guidelines to the group. Incumbents are responsible for assigning, coordinating, scheduling, organizing, and directing work. Incumbents have responsibility for developing recommendations for new policies and guidelines and for evaluating the work and staff in the assigned functional area.

EXAMPLES OF DUTIES

Typical duties may include, but are not necessarily limited to, the following:

- Supervise and participate in all duties and responsibilities for a segment (function) of the Department's work, performed by subordinate Engineering Aide and Technician positions, in the following engineering related areas:

  GENERAL: GIS/CAD/CADME, Database, and Other Computer Applications Support; and Computer Technology Support.

  PUBLIC WORKS: Street/Highway Design; Sewer and Storm Drain Design; Structural Analysis/Design; Traffic Analysis/Design; Contract Administration/Inspection; Survey.

  ELECTRIC: Electric Transmission and Distribution Design; Contract and Project Administration; Inspection; Power Quality, Standards and Specialized Technical Support; Substation Design; System Planning; and Distribution Feeder Analysis.

  WATER: General; Design, Plan Checking, and Contract Administration; Water Planning; Water Resources; and Water Operations.

- Supervise and participate in the preparation of plans and specifications; perform complex calculations and review estimates of time and material costs.

- Assign and supervise the examination of plans and specifications prepared by other departments and agencies; determine effect of the proposed work on existing electric or municipal facilities; determine feasibility of alternate construction proposals; and prepare estimates of relocation costs.

- Coordinate electric utility or municipal construction projects with private contractors and City construction crews.

- Participate in planning and preparation of engineering reports and studies, assigning and reviewing work of subordinate technical personnel.

- Assist in budget preparation and administration.

- Coordinate engineering activities with other City departments, divisions, sections, and with outside agencies.

- Serve as staff to a variety of City commissions, boards, and committees.

- Supervise, train, and evaluate technical subordinates.

QUALIFICATIONS

Knowledge of:

- Terminology, methods, practices, and techniques of manual and computer-aided drafting; manual and computer-aided drafting nomenclature and symbols.

- Trigonometry as applied to the computation of angles, areas, distances, and traverses.

- Surveying techniques and practices.

- Engineering maps and records.

- Computers and computer programs.

- Municipal or utility engineering policies and procedures.

- Advanced engineering techniques, principles, and practices related to area of assignment including estimating.

- Methods and materials in the design and construction of (depending upon assignment) municipal facilities including streets, sewers, storm drains; or electric/water utility facilities.

- Policies and regulations governing the construction, extension, and maintenance of (depending upon assignment) municipal facilities including streets, sewers, storm drains; or electric/water utility facilities.

- Technical report writing.

- State and federal contract regulations.

- Principles of supervision, training, and performance evaluation.

- Budget preparation and administration.

Ability to:

- Perform advanced, complex, engineering calculations with speed and accuracy; use discretion in interpreting results..

- Coordinate, prepare, and check complete plans, estimates, and materials of assigned large, complex, municipal or utility projects.
- Formulate and check complex technical drawings; use technical ability to resolve assignments that are broad in scope and involve unique and complex problems.
- Understand and apply advanced engineering principles and practices used in assigned area.
- Perform studies and write reports of advanced complexity.
- Perform technical research and provide reliable advice on engineering problems or projects.
- Communicate clearly and concisely, orally and in writing.
- Operate, and train others in the operation of, job related equipment including blueprint and copying machines; manual and computer-aided drafting equipment; printers and plotters; and personal computers and engineering-related computer programs.
- Operate a City vehicle.
- Coordinate engineering activities with other City departments, divisions, sections, and with outside agencies.
- Select, supervise, train, and evaluate subordinate technical staff.

Education and Experience:

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to completion of an Associate degree (60 semester units) from an accredited college or university with a major in engineering or closely related field.

Experience: Nine years of experience in the design and engineering phases of (depending upon assignment) municipal facilities including streets, sewers, storm drains; water utility facilities; or electric/water utility facilities. At least one year of the required experience must include lead/supervisory experience. An Associate Degree in a related field may substitute for one year of the required experience.

MEDICAL CATEGORY: Group 1

NECESSARY SPECIAL REQUIREMENT

Possession of an appropriate, valid class "C" California Motor Vehicle Operator's License.

When assigned water engineering responsibilities, possession of, or the ability to obtain, within six months, a valid AWWA Water Distribution Operation Operator Certificate of the appropriate grade or a valid California Department of Health Water Treatment Operator Certificate of the appropriate grade.

CAREER ADVANCEMENT OPPORTUNITIES

FROM: Utilities Supervising Engineering Technician (Electric)
Supervising Engineering Technician (Civil)

TO: Utilities Sr. Engineer, Utilities Sr. Electrical Engineer, or Utilities Sr. Water Engineer